

Cometary Tales

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Abstract. Some properties of cometary dust tails are reviewed, and suggestions made for future research.

1.

A cometary nucleus emits dust grains having a wide range of sizes as the surface ices sublime and release them.

2.

Immediately after release their speeds are small relative to the nucleus, compared with the speed of the nucleus around the Sun.

3.

Dust grains in the solar system experience two forces, the force of the Sun's gravity, and the force due to solar radiation pressure.

4.

Future work is needed to study how the dust grains move after being released from the nucleus. A comet in a circular orbit around the Sun would be particularly simple case to consider.